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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,998	11/29/2006	Shusaku Gotou	P30952	7971
52123 7590 12/26/2008 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER KIM, JAE K	
			ART UNIT 2821	PAPER NUMBER
			NOTIFICATION DATE 12/26/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/599,998	Applicant(s) GOTOU ET AL.	
	Examiner JAE K. KIM	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the second action in the application in response to the correspondence filed on 10 September 2008.
2. Claims 1 – 12 are pending in the application. Claims 1 – 6 and 9 have been amended, and claims 10- 12 are newly added from the 17 October 2006 correspondence. Claims 1 and 6 are independent claims.
3. Applicant's arguments with respect to claims from the 10 September 2008 correspondence have been considered and are addressed in the statement of rejection below, necessitated by amendment. Response to arguments follows the statement of rejection. This action is made Final.

Priority

4. Applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Japan on 04/18/2004 is denied. A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter.

Claim Objections

5. Claim 11 objected to because of the following informalities: Claim 11 contradicts the limitations in claim 1. Claim 1 details that the temperature detecting device and the light emitting device are on the same semiconductor chip, where claim 11 claims that the temperature detecting device and the light emitting device are not physically connected.

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Examiner asserts that physically connected can also include through other components; otherwise, the prior art could also be said to not be physically connected, as there are wires, etc., in between. For prosecution of the case that physically connected does not include through other components, the Examiner will take claim 11 to be another embodiment of the instant invention where the temperature detecting device and the light emitting device may not be on the same substrate or chip, or even that they are not connected through other components. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1 and 10 - 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otsuka (U.S. Patent 3,755,679) in view of Olschewski (U.S. Pat. 4,142,075).

7. As for claim 1, Otsuka teaches **a light emitting element having an electric signal terminal, the light emitting element being configured to emit light by an electric signal**

output from the electric signal terminal (Otsuka, Fig. 1) ... a light emitting element driving circuit and a temperature detecting element, (Otsuka, Fig. 1; Col. 1, Lines 41 - 44) ... the light emitting element driving circuit transmitting the electric signal to the electric signal terminal of the light emitting element (Otsuka, Fig. 1; Col. 1, Lines 41 - 46) ... the temperature detecting element detecting a temperature surrounding the light emitting element (Otsuka, Fig. 1; Col. 2, Lines 5 - 9; Olschewski, Col 12, lines 49 - 54) ... and is driven based on the temperature detected by the temperature detecting element. (Otsuka, Fig. 1; Col. 1, Lines 41 - 57). However, Otsuka fails to teach specifically that the **light emitting element is mounted on the semiconductor chip**, and that the semiconductor chip includes the driving circuit and the temperature detecting element or **the semiconductor chip being configured to drive the light emitting element**. Olschewski teaches the **light emitting element is mounted on the semiconductor chip** (Olschewski, Col. 12, Lines 58 - 62), and that the semiconductor chip includes the driving circuit and the temperature detecting element or **the semiconductor chip being configured to drive the light emitting element** (Olschewski, Col. 12, Lines 49 - 55). It would have been obvious to one having ordinary skill in the art to mount the light emitting element on a semiconductor chip for the benefits allowed through modularization. Also, it would have been obvious to one having ordinary skill in the art to use a semiconductor chip that included the driving circuit and the temperature detecting element for the benefits allowed through miniaturization. Additionally, the art of rearranging parts in is considered routine skill in the art. Olschewski's art is exemplary and it is well known and well practiced in the art at the time of

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the invention that circuitry in discrete parts can also be put in one package on top of a semiconductor chip.

8. As for claim 10, Otsuka and Olschewski teach the above limitations, but do not specifically teach **the semiconductor chip ceases to drive or deactivate the light emitting element at a predetermined temperature**. Examiner asserts that this limitation is well known and practiced in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to have a shut off feature in order to protect the light source and surrounding circuitry.
9. As for claim 11, Otsuka and Olschewski teach the above limitations, but do not specifically teach **the wherein the temperature detecting device is not physically connected to the light emitting device**. It would have been obvious to one of ordinary skill in the art at the time of the invention where the temperature detecting device and the light emitting device are not physically connected, Since it has been held that constructing formally integral structure in various elements involves only routine skill in the art.
10. As for claim 12, Otsuka and Olschewski teach the above limitations, and Otsuka further teaches **wherein the temperature detecting element detects the temperature of the light emitting element** (Otsuka, Fig. 1; Col. 2, Lines 5 - 9). It would have been obvious to combine for the already mentioned reasons above.
11. Claims 2 – 9 are rejected under the same rejections asserted in the prior action, as the amendments made do not change the scope of their counterparts and follow the same dependencies.

Response to Arguments

12. Examiner acknowledges the amendment to claim 2 and withdraws the previous 35 U.S.C. 112 rejection.
13. Examiner acknowledges the amendment to claim 3 and withdraws the previous claim objection.
14. Applicant's arguments in relation to the rejections made under 35 U.S.C. § 103 have been fully considered, but they are not persuasive.
15. With regards to the Applicant's argument that Olschewski fails to disclose a semiconductor chip comprising a temperature detection device, Examiner respectfully disagrees. Olschewski teaches photodiodes on chip 131 and 132 (Olschewski, Col 12, lines 49 - 54).
16. With regards to the Applicant's argument about the properties of a thermistor, both Olschewski and Otsuka also teach photodiodes. In addition, there are a plethora of other temperature detection devices that can be used which allow for the temperature detecting device and the light emitting device to be separated and allow for the same function.
17. Examiner also directs the Applicant to the argument detailed greatly in the above action that having circuitry either in discrete parts or in one package on top of a semiconductor chip is well practiced and known by persons of ordinary skill in the art at the time of the instant invention.
18. The Applicant's argument in reference to Bablock, are also unpersuasive for the same reasons already mentioned above.

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19. With regards to the Applicant's argument towards the dependent claims being allowable, Examiner deems them moot as the independent claims stand rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAE K. KIM whose telephone number is (571)270-5066. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JKK
/JAE K KIM/

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Examiner, Art Unit 2821

/Douglas W Owens/

Supervisory Patent Examiner, Art Unit 2821

December 22, 2008